9900259

THE UNITED STAYLES OF AMERICA

TO ALL TO WHOM THESE: PRESENTS SHAVE COME;

Enza Zaden Beheer B. A.

THE TERMS, THERE HAS BEEN PRESENTED TO THE.

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HERS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY CARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC CENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR UG IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY LAW.

LETTUCE

'Ponderosa'

In Jestimonn Thereof, I have hereunto set my hand and caused the seal of the Plant Inviring Irotection Office to be affixed at the City of Washington, D.C. this twenty-sixth day of July, at the year two thousand and five.

Allost:

Commissioner

No.

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

AGRICULTURAL MARKETING SERVICE		s. The following statements	FORM APPROVED - OMB NO. 0581-0 are made in accordance with the Privacy Acc
SCIENCE DIVISION - PLANT VARIETY PROTECTI		1974 [5 U.S.C. 552a].	
APPLICATION FOR PLANT VARIETY PROTEC (Instructions and information collection burden st		Certificate is to be issued i	order to determine if a plant variety protect 7 U.S.C. 2421). Information is held confiden U.S.C. 2426).
1. NAME OF APPLICANT(S) (as it is to appear on the Certificate)		2. TEMPORARY DESIGNATION EXPERIMENTAL NUMBER	OR 3. VARIETY NAME
Enza Zaden Beheer B.V.	5/05	Exp. 5007	Ponderosa
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, an	nd Country]	6. TELEPHONE finclude area co	FOR OFFICIAL USE ONLY
1352 Burton Avenue Salinas, California 939	901	(831) 754-23	PVPC NIMBER
		6. FAX (include area code) (831) 754-29	075 DATE
. GENUS AND SPECIES NAME	B. FAMILY NAT	AE (Botanical)	O SUNG AND EXAMINATION FEE
Lactuca sativa	Con	npositae	1 247 -
. CROP KIND NAME (Common name)			B DATE
Lettuce - Iceberg			<u>* -4/////49</u>
D. IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORG	ANIZATION (corporation,	partnership, association, etc.) (Common nai	C CERTIFICATION FEE:
Corporation I if incorporated, give state of incorporation		La Date of Woodpoor	V
California	12. DATE OF INCORPORATION 1986	E DATE	
San Juan Bautista, Calif CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (F.			(831) 623-1746
b. Exhibit B. Statement of Distinctness c. Exhibit C. Objective Description of the Variety d. Exhibit D. Additional Description of the Variety e. Exhibit E. Statement of the Basis of the Applicant's Ownership			
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INSTRUCTIONS

9900259

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in 1 PVPO: (1) Completed application form signed by the owner; (2) completed Exhibits A, B, C, E; (3) at least 2,500 viable untreat seeds, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture via be deposited and maintained in a public repository prior to issuance of a certificate; (4) check drawn on a U.S. bank for \$2,4 (\$300 filing fee and \$2,150 examination fee), payable to "Treasurer of the United States" (See Section 97.175 of the Regulation and Rules of Practice.) Partial applications will be held in the PVPO for not more than 30 days, then returned to the applicant unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 500, NAL Building, 103 Baltimore Blvd., Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are sexplanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the Unit States" in the amount of \$300 for issuance of the Certificate.

Plant Variety Protection Office Telephone: (301) 504-5518

ITEM

- 16a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
 - (2) the details of subsequent stages of selection and multiplication;
 - (3) evidence of uniformity and stability; and
 - (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified.
- 16b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all oth varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
 - (1) identify these varieties and state all differences objectively;
 - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences;
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clea indicate distinctness.
- 16c. Exhibit C forms are available from the PVPO for most crops; specify crop kind. Fill in Exhibit C (Objective Description o Variety) form as completely as possible to describe your variety.
- Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 16e. Section 52(4) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. The applicant may be the actual breeder, the employee of the breeder, the owner through purchase or inheritance, etc.
- If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant may NO reverse this affirmative decision after the variety has been sold and so labelled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See P.L. 103-349 for additional information.)
- 20. See Sections 41, 42, and 43 of the Act and Section 97.175 of the regulations for eligibility requirements.

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of owners or assignment during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing change of ownership or assignment is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Section 97.130, 97.131, 97.175(h) of Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant should check the variety names proposed by contacting: Se Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center-East, Beltsville, MD 20705. Telephone: (301) 504-8089.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering an information of information, send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Officer, OIRM, AG Box 7630, Washington, DC 20250; and to the Office of Management and Budget, Paperwo Reduction Project (OMB No. 0581-0056), Washington, DC 20503.

EXHIBIT A

Origin and Breeding History of the Variety

Lettuce: Ponderosa

Ponderosa originated from a cross made in 1992 between two Coastal Seeds, Inc. breeding lines: XP 64-1-2A-2 and XP 68-4-1L-4. XP64-1-2A-2A-2 was developed from a cross of breeding line XP15-3 (Greenlake x Salinas), a corky root resistant line, and Alpha DMR, a variety resistant to downy mildew (*Bremia lactucae*) pathotypes I, IIA, and III. XP64-1-2A-2 is the progenitor of the variety 'Bronco' with similar size and type and is resistant to both corky root and downy mildew pathotypes I, IIA, III. XP68-4-1L-4 was developed from a cross of breeding line XP19 (Don Juan x Pacific), a F₁ line with resistant genes for lettuce mosaic virus and big vein virus, and the variety Alpha DMR. XP68-4-11-4 is resistant to lettuce mosaic virus and downy mildew pathotypes I, IIA and III.

The primary objective of the cross, designated 3x534 was to develop a variety with larger size than Alpha DMR and resistant to corky root disease. The pedigree method of plant breeding employing single plant selection was used in the development of Ponderosa. Screening for disease resistance was utilized in combination with the selection process.

The stages of selection, disease screening and seed multiplication involved in the development of Ponderosa are as follows:

- 1. Cross made and F_1 increased in greenhouse.
- 2. F₂ generation grown on Coastal Seed trial grounds located in San Juan Bautista, California, area. Four larger size plants with good heading ability were selected as single plant selections.
- 3. F₃ generation grown in trials located on big vein virus infested ground in the Salinas Valley. Six single plant selections were made with less big vein symptoms and larger size than Alpha DMR.
- 4. F₄ generation grown in trials located on corky root disease infested ground. The line was segregating for corky root resistance. Two single plant selections were made based on resistance to corky root, larger head size and good heading ability. The two single plant selections were designated 3x534-1C6A and B.
- 5. F₅ generation.3x534-1C6A and B were evaluated in early spring trials grown on the San Juan Bautista trial grounds. Selection 3x534-1C6A was very uniform for type and was larger in size compared to Alpha DMR. A decision

- was made to make a small seed increase of 3x534-1C6A in the company's screenhouse located on the trial grounds.
- 6. The seed increase (F₆ generation was designated Exp.5007 and screened for corky root resistance with inoculum obtained from the Plant Pathology Department, University of California at Davis. Exp.5007 tested 100% corky root resistant. Exp. 5007 was also screened for lettuce mosaic virus resistance and was shown to be resistant. The LMV inoculum for disease screening was obtained from the USDA Research Station in Salinas, California.
- 7. Exp.5007 was evaluated in extensive trial and field plantings in 1996 and 1997 in the lettuce growing areas of California. Field plantings on corky root infested ground confirmed its resistance to the disease. Exp. 5007 was uniform and stable for type with no observed variants and a commercial seed increase was decided for 1997.
- 8. A commercial seed increase as Ponderosa using Exp.5007 for stock seed was made in Australia. The seed increase was screened for corky resistance and shown to be resistant. Trial and field plantings demonstrated that Ponderosa was uniform and stable. No variants were observed.
- 9. In 1998, a commercial seed increase was grown in California using the Australia production seed as stock seed. Trial and field plantings confirmed that Ponderosa was uniform and stable. No variants were observed. Disease screening demonstrated that Ponderosa was uniform and stable for corky root resistance

Ponderosa can be distinguished from the direct parent lines as follows:

- 1. XP64-1-2A-2: Ponderosa has smaller head size, shorter core length and is resistant to lettuce mosaic virus. XP64-1-2A-2 is susceptible to lettuce mosaic virus.
- 2. XP68-4-1L-4: Ponderosa is corky root resistant while XP68-4-1L-4 is susceptible.

Ponderosa has been evaluated in extensive trial and field plantings in the lettuce growing areas of California. Ponderosa has maintained a high degree of uniformity and stability for type from the F_5 through three generations of seed increase. No variants have been observed. Ponderosa has also been uniform and stable for corky root resistance from the F_5 through three generations of seed increase.

Exhibit B:

PADOS

Ponderosa is most similAR To Alfa DMR And Bronco.

Ponderosa is resistant to Corky Root rot and Lettuce Mosaic Virus (LMV). Genetic resistance to Corky Root rot is inherited as a homozygous recessive trait. Genetic resistance to Lettuce Mosaic Virus is inherited as a homozygous recessive trait. Ponderosa is distinct from 'Alpha DMR' PVP # 9000055 in having resistance to Corky Root rot and LMV where 'Alpha DMR' is susceptible to both diseases. Ponderosa is distinct from 'Bronco' PVP # 9500116 in having resistance to LMV where 'Bronco' is susceptible to LMV.

MAP 4/25/05

OBJECTIVE DESCRIPTION OF VARIETY LETTUCE Lactuca sativa

NAME OF APP			2	OV FOR OFFICIAL USE ONLY
	COASTAL SEEDS		Laden Behoor	B.V. PVPO NUMBER
ADDRESS (SITE	retand No. or R.F.D. No., C 1352 Burton A		•	9900259
	Salinas, Cali			EXPERIMENTAL DESIGNATION
· · · · · · · · · · · · · · · · · · ·				
Place numbers i spaced plants.	in the boxes for the characte Royal Horticultural Society	rs which best describe this vi or any recognized color stan	rriety. Measured data should dard may be used to determi	be the mean of an appropriate number (at least 10) of we ne plant colors.
The location of	the test area is: and San Juan Baut	ista. CA	Color System Use RHS 146C -	d: Salinas and San Juan Bautista, CA
1. PLANT TYP		d check varieties page 4.)	11110 1100	Salitas and Sali State Batters of
06	01=Cutting/Leaf 02=Butterhead 03=Bibb 04=Cos or Romaine	05=Great Lakes G 06=Vanguard Grou 07=Imperial Group	p 10=Latin 11=OTHER:	
2. SEED:	color 1=White (Silver Gray)	LIGHT DORM	ANCY HE	AT DORMANCY
2	2=Black (Gray Brown) 3=Brown (Amber)	1=Light Requir 2=Light Not R	12 1 17	Susceptible Not Susceptible
3. COTYLEDO	N TO FOURTH LEAF STA	GE: NOTE: Provide a colo grown under o	or photograph or photocopy optimal conditions.	of the fourth leaf from 20 day old seedling
2	SHAPE OF COTYLEDONS	: 1=Broad 2=	Intermediate 3=Spa	itulate
			·	
4	SHAPE OF FOURTH LEAF	:		
				111 513
	1	2 3	4	5 6
*	•	•		
1 7	LENGTH/WIDTH INDEX O	F FOURTH LEAF: L/W x 1	o	
ت	APICAL MARGIN:	1=Entire 2=Creanate/Gnawed 3=Finely Dentate	4=Moderately Dentate 5=Coarsely Dentate 6=Incised	7=Lobed 8=OTHER (specify)
2	UNDULATION:	1=Flat	2=Slight	3=Medium 4=Marked
4	GREEN COLOR:	1=Yellow Green 2=Light Green	3=Medium Green 4=Dark Green	5=Blue Green 7=Gray Green 6=Silver Green
7	ANTHOCYANIN:			
1	DISTRIBUTION:	1=Absent 2=Margin Only	3=Spotted 4=Throughout	5=OTHER (specify)
	CONCENTRATION:	1-Light	2=Moderate .	3=Intense
1_	ROLLING:	1=Absent	2=Present	
1 _0	CUPPING:	1=Uncupped	2=Slight	3=Markedly

4.			LEAVES (observe harvest-matur	e outer leaves); ture leaves which accurately shows color a	nd mergin characteristics.	-
-		2	MARGIN: INCISION DEPTH: (deepest penetration of th	1=Absent/Shallow (Dark Green Boston)	2=Moderate (Vanguard)	3=Deep (Great Lakes 659)
		4	INDENTATION: (finest divisions of the margin.	1=Entire (Dark Green Boston) 2=Shallowly Deserve (Green Laker 65)	3=Desply Dentate (Great Lakes 659) 4=Crenate (Vanguard)	5-OTHER (apecify)
•		2	UNDULATION OF THE APICAL MARGIN:	1=Absent/Slight (Dark Green Boston)	2-Moderate (Vanguard)	3-Strong (Great Lakes 659)
		4	GREEN COLOR:	1=Very Light Green (Bibb) 2=Light Green (Minetto)	3-Medium Green (Great Lakes) 4-Dark Green (Vanguard)	5=Very Dark Green 6-OTHER
			ANTHOCYANIN (grown at or	r below 10 C):		
		1	DISTRIBUTION:	1=Absent 2=Margin Only (Big Boston)	3-Spotted (Calif, Cream Butter) 4-Throughout (Prize Head)	5-OTHER (specify)
	,		CONCENTRATION:	1=Light (Iceberg)	2=Moderate (Prize Head)	3=Intense (Ruby)
		2	SIZE:	1=Small	2=Medium	3×Large
		2	GLOSSINESS:	1=Dull (Vanguard)	2=Moderate (Salinas)	3=Glossy (Great Lakes)
		2	BLISTERING:	1=Absent/Slight (Salinas)	2=Moderate (Vanguard)	3=Strong (Prize Head)
		2	LEAF THICKNESS:	1=Thin	2=Intermediate	3=Thick
			TRICHOMES:	1=Absent (smooth)	2=Present (spiny)	
5.	PLAN	NT (al	market stage. Choose a compan	ison variety appropriate for this type.):		
	4	3	SPREAD OF FRAME LEAVES	47 em Bronco	(specify comparison variet	
		<u> </u>	em This Variety HEAD DIAMETER (market tri		(specify comparison burner	37
	1	6	cm This Variety	19 cm Bronco	(specify comparison variet	y)
		3		1=Flattened 2=Slightly Flattened	3=Spherical 4=Elongate	5=Non-Heading 6=OTHER
		2	HEAD SIZE CLASS:	1=Small	2=Medium	3=Large
	2	4	HEAD COUNT PER CARTON			
8	3 5	3	HEAD WEIGHT: o This Variety	7 8 9 , Bronco	(specify comparison variet	y)
		3	11E 4 D E1D4444EDC.	1=Loose 2=Moderate	3=Firm 4=Very Firm	
6.	BUTT	(bot	tom of market-trimmed head):			·
		2	SHAPE:	1=Slightly Concave	2=Flat	3=Rounded
	[1	MIDRIB:	t=Flattened (Salinas) 61 ddV 66.	2=Moderately Raised	3=Prominently Raised (Great Lakes 659)
7. 0	CORE	(stem	of market-trimmed head):			
	3	3	mm Diameter at base of head	NECESSIO	·	
	4	8	Ratio of head diameter/core dia	meter		:
		3	core height from base of head to mm This Variety	5 3 mm Bronco	(specify comparison variety	
			Give First Water Date <u>4/25/</u> mments		the date seed first receives adequate mo- ften does equal the planting date,	istuf#
	6	3		r Date to seed stalk emergence (summer of	conditions): (specify comparison variety	/
	 	3	POLITING OLARS.	~Very Slow	3-Medium 4-Rapid	5-Very Rapid
	2	8	Height of mature seed stalk: cm. This Variety	1 4 2 cm Bronco	(specify comparison variety	· · · · · · · · · · · · · · · · · · ·
					 	

	4	6		id of B This Va		ant (at wid	iest ;		3]cm _	Bro	onco		(4)	pecify com	iparison var	riety)	990	0259	}
		2	BOL	TER L	EAVES	S:	1=	Straigh	τ					2=Curved		:			Ċ,	
		2		MARC	GIN:		1=	Entire						2=Dentate						
		2		COLO	R:		7-	Light G	reen					2-Medium Gri	cen		3=	Dark Gre	en	
		2		TERM	IABIT: IINAL ORESCI	ENCE:	1=.	Absent						2=Present						
•	1	2			RAL St	HOOTS:	1-	Absent		·				2=Present						
• •		1	-	BASA	L SIDE	SHOOTS	1=.	Absent						2=Present			· · · ·	·		
). M						<i>t-mature h</i> n for at lea				· .										
		SEA	SON	4	Applic. 1	∐ #of day	, (Check 1	/ #o	f days					CHECK V	ARIETY 3/				
		Sprin	9			7 6			- 8	1		Bron	co					· · · · · · · · · · · · · · · · · · ·		
		Sumr	mer			68			7	1		Bron	co							
		Fall				7 3			7	7		Bron	1CO		······································					
		Winte	er										-, -			· .	· ·	· .		
Giv	ve pi	anting	date(s), and	location	n(s):											t_{i}	, .		
		Sprin	g	Mar	ch 1	5 - S	an	Ju	an	Bau	ti	sta,	CA					·	•	
		Sumr	ner	Ju1	y 2	- Sa1	.in	as,	CZ	& <i>A</i>	Sa	n. Ju	an E	Bautista,	, CA		<u>-</u>			· .
. :		Fall		Aug	ust	1 - 0	hu	.a1a:	r,	CA									· · · · ·	
		Winte								-					and a second					
				date	to harve	st.		<u>2/ Fil</u>	ll in c	heck v	ariet	y name	on the	appropriate line,	•					
0. /	ADA	PTAT		ARY	REGIO	NS OF AD	APT	'ION /t	estec	l and p	rover	n adapti	ed):	(0=Not tested	. 1	∍Not Adap	ted	2 = A	dapted)	
	.	Ó	South	west (Calif., A	Ariz, desert	ט	[2.	West (C	Coast		0	Northeast	• • •					
•		0	North	centra	at			(0	South	east			OTHER						
	1	-	SEAS	ON: Spring	(area —	Salina	ន ខ	. Sar	ita_	<u>Ma</u> ŗ:	ia,	CA	2	Fall (area_Sa	linas	& Sant	a Ma	ria, C	LA Fig.	
	• •					<u>Salina</u>							0	Winter (area	-)		
		0	GREE	ОНИ	use:		0-	Not tes	ted					1=Not Adapted	3		2=/	Adapted		
		12	SOIL	TYPE	:		1=#	Mineral						2=Organic			3-6	loth		

FORM LS-470-1 (9-86) 0----

11. DISEASES	AND STRESS REACTIONS (0	=Not tested; 1=Suscep	tible; 2-Inter	mediate; 3=Resis	itant; 4-Highly resistant;	5-Tolerant):
	VIRUS				FUNGAL/BACTERIA	<u>:</u>
	2 Big Vein		Ä	Corky Root F	Rot (Pythium Root Rot)	
•	3 Lattuce Mosaic	•	Ī	Downy Milde	w (Races	1
*	O Cucumber Mosaic		[ew	
	Broad Bean Wilt		1	<u></u> T		
-	Turnip Mossic			싁	Rot (Pseudomonas spp. (k others)
	O Beet Western Yellows			Botrytis (Gray		
	Lett. Infectious Yellows	•		Дотнея		
	O Other Virus		<u>. </u>	J - · · · - · ·		
	[O] v		_			
	INSECTS				PHYSIOLOGICAL/STR	ESS
	O Cabbage Loopers			Tipbum	Salt	
	O Root Aphids	•		Heat	5 Brown Rib (Ril	Discoloration, Rib Blight)
•	O Green Peach Aphid) Drought	OTHER	<u></u>
	Other Insect		_ [Cold		•
		· .				
	5 Pink Rib	POST	HARVEST	Tinnanai Bib M	annair (Blackbauer Georg	Bib Geny Ctenabl
ř	——————————————————————————————————————			ב ר	ecrosis (Blackheart, Gray	niu, Giay Streak
	5 Russet Spotting		[_5	Brown Stain		
·	5 Rusty Brown Discolorati	ion .	<u></u>			
12. BIOCHEMICA	AL OR ELECTROPHORETIC MA	ARKERS:		•		

13. COMMENTS:			Tamb III	11- ON 4	n good product:	on field
	* Section 8: Data	i collected at	LOST HI	IIS, CA I	n seed product	on rieta.
•						
						•
						· · · · · · · · · · · · · · · · · · ·
÷		12.5V 61.3dV	66.		•	
					•	÷
		Odhe SWV-V	/በ ኖስ			
		suggested	·	IETIES		····
4	TYPE			CHE	CK VARIETY	
	1) CUTTING/LEAF 2) BUTTERHEAD 3) BIBB			SALAD DARK (BIBB	BOWL GREEN BOSTON	

BIBB
COS, OR ROMAINE
GREAT LAKES GROUP
VANGUARD GROUP
IMPERIAL GROUP
EASTERN GROUP
STEM
LATIN

4) 5) 6) 7) 8) 9)

BIBB
PARRIS ISLAND
GREAT LAKES 659-700
VANGUARD
VIVA
ITHACA
CELTUCE
MATCHLESS

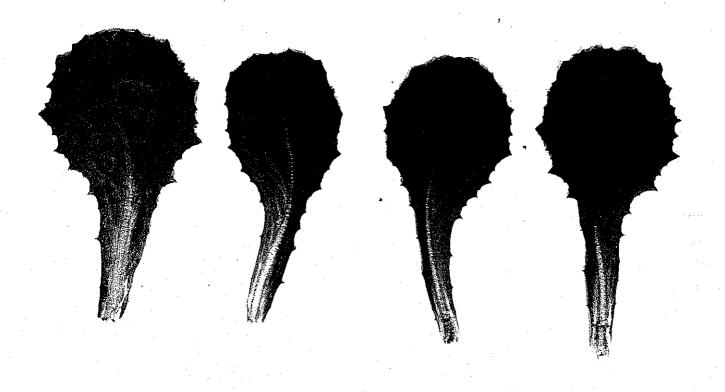


Exhibit 16D: Ponderosa

4th True Leaf from 20 day Old Seedling

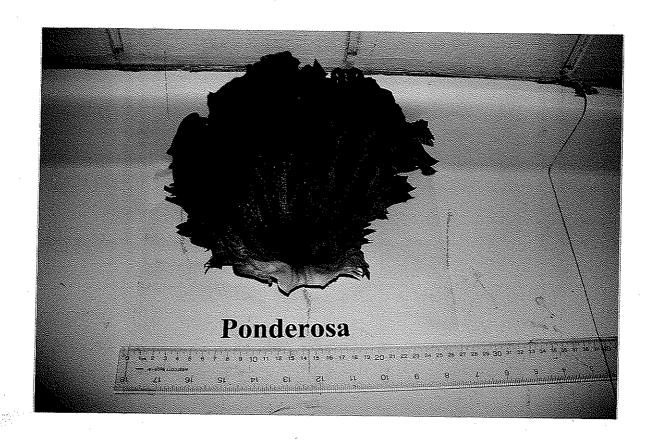


Exhibit 16D: Ponderosa

Mature Wrapper Leaf

Results of Corky Root Screening on Lettuce Cultivars a, b

Corky Root Test No. 1 1999

Cultivar	Resistant	Susceptible
Diamond	0	62
Ponderosa 1998 Production	32	0
Cowboy 1998 Production	28	0
Gladiator 1998 Production	29	0
Hearts Delight 1998 Production	32	0
Corky Root Test No. 1 1997		
Green Towers	0	15
Bautista	17	0
Mardi Gras 1996 Stock Seed	17	0
3x534-1C6A (Exp. 5007)	16	0
Corky Root Test No. 3 1997		
Diamond	0	30
Bronco	31	0
3x534-1C6A (Exp.5007)	17	0

^a Tests were conducted under controlled conditions at Coastal Seeds, Inc. research facility near San Juan Bautista, California. All seedlings were inoculated twice and held at a constant temperature of 28 C.

^b Unless noted otherwise all production lots were grown in California.

Results of Lettuce Mosaic Virus Testing on Lettuce Cultivars ^a

<u>Cultivar</u>	Resistant	Susceptible
Esmeralda	49	0
Bautista	55	0
Gladiator	57	0
Ponderosa	57	0
Medallion	54	0
Mardi Gras	0	58
Hearts Delight	0	56
Margarita	55	0
Desert Storm	5 9	0
Darkland Cos	0	53
Green Towers	0	53



^a Tests conducted at Coastal Seeds, Inc. research facility at San Juan Bautista, California, from inoculum provided by USDA-ARS, Salinas, Ca.

Frame Width Data (cm)

Location: Salinas, California, 10/08/98

-	Rep 1		Rep	2	Rep 3		
	Ponderosa	Bronco	Ponderosa	Bronco	Ponderosa	Bronco	
1	43.0	45.0	44.0	46.0	45.0	45.0	
2	44.0	49.0	43.0	47.0	45.0	45.0	
3	45.0	47.0	45.0	46.0	44.0	46.0	
4	44.0	45.0	44.0	47.0	42.0	45.0	
5	42.0	44.0	44.0	48.0	41.0	43.0	
6	43.0	46.0	44.0	45.0	42.0	46.0	
7	42.0	46.0	43.0	47.0	40.0	44.0	
8	40.0	46.0	44.0	46.0	42.0	45.0	
9	42.0	47.0	41.0	45.0	44.0	44.0	
10	44.0	45.0	43.0	47.0	43.0	44.0	
11	40.0	44.0	44.0	47.0	41.0	43.0	
12	41.0	48.0	44.0	45.0	42.0	45.0	
13	40.0	44.0	45.0	45.0	43.0	43.0	
14	44.0	44.0	43.0	45.0	44.0	42.0	
15	41.0	47.0	44.0	44.0	45.0	46.0	
16	42.0	45.0	44.0	44.0	41.0	44.0	
17	40.0	46.0	43.0	45.0	40.0	44.0	
18	42.0	47.0	44.0	44.0	40.0	42.0	
19	41.0	44.0	42.0	45.0	42.0	44.0	
20	40.0	48.0	45.0	45.0	44.0	45.0	
Means (cm)	43.65	45.65	43.65	45.65	42.50	44.25	

ANOVA

Source of				
Variation	SS	df	MS	\mathbf{F}
Reps	32.717	2	16.358	8.3851169
Variety	192.53	1	192.53	98.690647
RxV	26.317	2	13.158	6.7448291
Error	222.4	114	1.9509	
Total	473.97	119		Alpha=0.05

Frame Width Data (cm.)

Location: Chualar, California, 10/15/98

	Rep 1		Rep	2	Rep 3		
	Ponderosa	Bronco	Ponderosa	Bronco	Ponderosa	Bronco	
1	43.0	50.0	44.0	47.0	42.0	46.0	
2	41.0	45.0	45.0	45.0	42.0	47.0	
3	44.0	45.0	42.0	46.0	42.0	49.0	
4	44.0	48.0	43.0	48.0	40.0	48.0	
5	43.0	46.0	44.0	46.0	45.0	49.0	
6	45.0	48.0	43.0	47.0	44.0	48.0	
7	45.0	47.0	40.0	50.0	40.0	47.0	
8	44.0	45.0	45.0	47.0	43.0	48.0	
9	41.0	48.0	43.0	47.0	41.0	49.0	
10	44.0	47.0	43.0	48.0	42.0	49.0	
11	41.0	49.0	45.0	46.0	44.0	49.0	
12	44.0	51.0	44.0	49.0	45.0	49.0	
13	42.0	46.0	41.0	46.0	44.0	46.0	
14	43.0	50.0	42.0	50.0	42.0	49.0	
15	43.0	48.0	44.0	50.0	44.0	46.0	
16	41.0	46.0	43.0	46.0	45.0	48.0	
17	44.0	46.0	45.0	47.0	44.0	47.0	
18	42.0	46.0	43.0	49.0	43.0	47.0	
19	41.0	45.0	44.0	47.0	45.0	48.0	
20	42.0	46.0	41.0	48.0	44.0	45.0	

Means (cm)	43.05	47.70	43.20	47.45	42.85	47.10	

ANOVA

Source of				
Variation	SS	df	MS	F
Reps	3.8	2	1.9	0.8278234
Variety	576.41	1	576.41	251.13912
RxV	1.0667	2	0.5333	0.2323715
Error	261.65	114	2.2952	
Total	842.92	119		Alpha=0.05



Head Weight Data (g)

Location: Salinas, California, 10/08/98

	Rep 1		Rep	2	Rep 3		
	Ponderosa	Bronco	Ponderosa	Bronco	Ponderosa	Bronco	
1	845.0	630.0	702,0	621.0	759.0	694.0	
2	709.0	627.0	733.0	557.0	599.0	599.0	
3	825.0	680,0	675.0	675.0	652.0	652.0	
4	715.0	687.0	735.0	735.0	679.0	607.0	
5	725.0	674.0	799.0	688.0	747.0	685.0	
6	691.0	758.0	734.0	734.0	651.0	591.0	
7	754.0	697.0	662.0	618.0	700.0	676.0	
8	761.0	708.0	743.0	703.0	703.0	703.0	
9	754.0	847.0	747.0	747.0	739.0	739.0	
10	803.0	688.0	686.0	626.0	686.0	686.0	
11	791.0	645.0	669.0	639.0	678.0	635.0	
12	817.0	665.0	711.0	611.0	712.0	712.0	
13	678.0	707.0	761.0	723.0	766.0	689.0	
14	831.0	781.0	682.0	682.0	655.0	655.0	
15	746.0	645.0	680.0	645.0	691.0	634.0	
16	715.0	692.0	695.0	623.0	715.0	697.0	
17	787.0	684.0	746.0	706.0	731.0	731.0	
18	732.0	654.0	722.0	705.0	749.0	749.0	
19	762.0	679.0	655.0	655.0	762.0	662.0	
20	687.0	696.0	593.0	593.0	695.0	695.0	
Means (g)	756.40	692.20	703.45	674.55	706.50	664.30	

ANOVA

Source of				
Variation	SS	df	MS	F
Sample	36963	2	18482	7.7875609
Column	61020	1	61020	25.711836
Interaction	6356.6	2	3178.3	1.3392253
Within	270549	114	2373.2	
Total	374889	119		Alpha=0.05

Head Weight Data (g)

Location: Chualar, California, 10/15/98

:	Rep 1		Rep	Rep 2		Rep 3	
	Ponderosa	Bronco	Ponderosa	Bronco	Ponderosa	Bronco	
1	936.0	888.0	865.0	738.0	738.0	839.0	
2	800.0	807.0	945.0	718.0	817.0	840.0	
3	932.0	907.0	916.0	696.0	1,005.0	711.0	
4	802.0	876.0	929.0	757.0	931.0	783.0	
5	844.0	825.0	848.0	803.0	848.0	799.0	
6	784.0	918.0	875.0	782.0	975.0	668.0	
7	1,005.0	827.0	760.0	705.0	813.0	750.0	
8	808.0	795.0	880.0	724.0	834.0	739.0	
9	810.0	868.0	805.0	763.0	706.0	846.0	
10	932.0	865.0	872.0	813.0	783.0	757.0	
11	796.0	925.0	909.0	729.0	801.0	713.0	
12	831.0	847.0	829.0	738.0	988.0	804.0	
13	962.0	832.0	876.0	742.0	845.0	750:0	
14	932.0	851.0	794.0	790.0	731.0	766.0	
15	763.0	830.0	962.0	813.0	768.0	711.0	
16	838.0	859.0	882.0	854.0	729.0	713.0	
17	1,156.0	828.0	829.0	766.0	738.0	725.0	
18	996.0	788.0	901.0	851.0	723.0	704.0	
19	931.0	816.0	872.0	776.0	762.0	725.0	
20	749.0	770.0	863.0	823.0	692.0	704.0	
Ĺ							
Means (g)	880.35	846.10	870.60	769.05	811.35	752.35	

ANOVA

Source of				
<u>Variation</u>	SS	df	MS	F
Sample	132634	2	66317	13.739482
Column	126490	1	126490	26.206081
Interaction	23175	2	11587	2.4006349
Within	550249	114	4826.7	
Total	832548	119		Alpha=0.05

Head Diameter Data (cm)

Location: Salinas, California, 10/08/98

	Rep 1		Rep	Rep 2		Rep 3	
:	Ponderosa	Bronco	Ponderosa	Bronco	Ponderosa	Bronco	
1	15.0	19.0	16.0	18.0	16.0	21.0	
2	16.0	17.0	16.0	19.0	16.0	19.0	
3	15.0	18.0	17.0	19.0	17.0	22.0	
4	15.0	19.0	17.0	21.0	16.0	18.0	
5	17.0	20.0	16.0	20.0	16.0	17.0	
6	16.0	21.0	16.0	19.0	15.0	19.0	
. 7	17.0	19.0	16.0	19.0	15.0	18.0	
8	15.0	19.0	15.0	19.0	16.0	17.0	
9	16.0	17.0	17.0	18.0	15.0	19.0	
10	15.0	18.0	17.0	17.0	17.0	20.0	
11	15.0	19.0	15.0	19.0	17.0	20.0	
12	16.0	18.0	15.0	20.0	15.0	19.0	
13	16.0	20.0	18.0	21.0	16.0	22.0	
14	16.0	20.0	19.0	20.0	18.0	19.0	
15	16.0	19.0	17.0	19.0	17.0	19.0	
16	17.0	18.0	16.0	21.0	16.0	18.0	
17	17.0	17.0	15.0	18.0	16.0	17.0	
18	16.0	19.0	15.0	20.0	17.0	19.0	
19	18.0	18.0	19.0	17.0	16.0	20.0	
20	17.0	17.0	16.0	19.0	16.0	18.0	
L							
Means (cm)	16.05	18.60	16.40	19.15	16.15	19.05	

ANOVA

Source of				
Variation	SS	df	MS	F
Reps	4.1167	2	2.0583	1.5790713
Variety	224.13	1	224.13	171.94616
$R \times V$	0.6167	2	0.3083	0.236541
Error	148.6	114	1.3035	
Total	377.47	119		Alpha=0.05

Head Diameter Data (cm.)

Location: Chualar, California, 10/15/98

	Rep 1		Rep	Rep 2		Rep 3	
	Ponderosa	Bronco	Ponderosa	Bronco	Ponderosa	Bronco	
1	16.0	17.0	15.0	17.0	17.0	16.0	
2	16.0	20.0	15.0	17.0	17.0	18.0	
3	15.0	18.0	16.0	18.0	16.0	17.0	
4	15.0	19.0	16.0	19.0	15.0	18.0	
5	15.0	18.0	16.0	20.0	15.0	16.0	
6	14.0	17.0	16.0	18.0	16.0	19.0	
. 7	15.0	19.0	15.0	17.0	17.0	21.0	
8	17.0	17.0	17.0	19.0	16.0	19.0	
9	16.0	18.0	15.0	19.0	15.0	18.0	
10	15.0	19.0	16.0	20.0	16.0	17.0	
11	16.0	19.0	17.0	19.0	17.0	17.0	
12	17.0	20.0	18.0	18.0	15.0	18.0	
13	16.0	18.0	15.0	17.0	16.0	16.0	
14	15.0	17.0	16.0	16.0	16.0	19.0	
15	17.0	18.0	16.0	16.0	15.0	18.0	
16	16.0	16.0	17.0	17.0	16.0	17.0	
17	17.0	16.0	15.0	18.0	17.0	16.0	
18	16.0	15.0	16.0	19.0	18.0	18.0	
19	15.0	17.0	15.0	18.0	16.0	17.0	
20	16.0	17.0	16.0	17.0	17.0	17.0	
Į.	waa						
Means (cm)	15.75	17.75	15.90	17.95	16.15	17.60	

ANOVA

Source of				
Variation	SS	df	MS	F
Reps	0.65	2	0.325	0.2773204
Variety	100.83	. 1	100.83	86.040419
$R \times V$	2.2167	2	1.1083	0.9457335
Error	133.6	114	1.1719	
Total	237.3	119		Alpha=0.05

Core Diameter Data (mm.)

Location: Salinas, California, 10/08/98

	Rep 1		Rep	Rep 2		Rep 3	
	Ponderosa	Bronco	Ponderosa	Bronco	Ponderosa	Bronco	
1	28.0	34.0	28.0	34.0	32.0	37.0	
2	32.0	35.0	33.0	36.0	32.0	35.0	
3	33.0	34.0	32.0	37.0	30.0	36.0	
4	33.0	33.0	.33.0	35.0	31.0	35.0	
5	32.0	31.0	30.0	34.0	28.0	34.0	
6	31.0	32.0	32.0	31.0	32.0	33.0	
7	33.0	33.0	35.0	35.0	30.0	31.0	
8	32.0	34.0	31.0	37.0	32.0	34.0	
9	32.0	31.0	33.0	34.0	33.0	32.0	
10	33.0	30.0	33.0	33.0	32.0	35.0	
11	30.0	35.0	32.0	36.0	30.0	35.0	
12	32.0	37.0	31.0	37.0	34.0	37.0	
13	33.0	36.0	30.0	34.0	32.0	34.0	
14	33.0	34.0	34.0	33.0	31.0	33.0	
15	31.0	33.0	32.0	32.0	32.0	33.0	
16	29.0	35.0	31.0	31.0	33.0	34.0	
17	31.0	36.0	31.0	34.0	29.0	32.0	
18	32.0	34.0	30.0	35.0	33.0	36.0	
19	30.0	35.0	32.0	36.0	32.0	35.0	
20	32.0	33.0	33.0	34.0	33.0	34.0	
Means (mm)	31.60	33.75	31.80	34.40	31.55	34.25	

ANOVA

Source of				
Variation	SS	df	MS	·
Sample	3.6167	2	1.8083	0.6753481
Column	185.01	1	185.01	69.094021
Interaction	1.7167	2	0.8583	0.3205569
Within	305.25	114	2.6776	
Total	495.59	119	·	Alpha=0.05

Core Diameter Data (mm.)

Location: Chualar, California, 10/15/98

	Rep 1		Rep	Rep 2		Rep 3	
:	Ponderosa	Bronco	Ponderosa	Bronco	Ponderosa	Bronco	
1	31.0	35.0	32.0	37.0	33.0	38.0	
2	32.0	39.0	31.0	35.0	30.0	37.0	
3	34.0	36.0	30.0	33.0	32.0	36.0	
4	32.0	34.0	33.0	39,0	31.0	36.0	
5	33.0	37.0	33.0	32.0	34.0	37.0	
6	36.0	38.0	31.0	39.0	32.0	39.0	
7	34.0	37.0	34.0	40.0	32.0	37.0	
8	31.0	36.0	32.0	34.0	33.0	41.0	
9	31.0	39.0	33.0	35.0	34.0	39.0	
10	33.0	34.0	30.0	37.0	33.0	37.0	
11	33.0	33.0	32.0	38.0	32.0	38.0	
12	32.0	38.0	32.0	39.0	30.0	38.0	
13	33.0	37.0	33.0	39.0	31.0	37.0	
14	34.0	36.0	33.0	34.0	35.0	36.0	
15	34.0	34.0	35.0	36.0	34.0	34.0	
16	29.0	38.0	34.0	37.0	33.0	33.0	
17	34.0	37.0	33.0	38.0	32.0	33.0	
18	32.0	37.0	30.0	35.0	31.0	34.0	
19	31.0	38.0	35.0	34.0	34.0	37.0	
20	33.0	36.0	34.0	37.0	33.0	37.0	
				ŀ		•	
Means (mm)	32.45	36.70	32.50	36.40	32.60	36.45	

ANOVA

Source of				
Variation	SS	df	MS	F
Reps	0.3167	2	0.1583	0.0494927
Variety	480	1	480	150.04113
RxV	0.95	2	0.475	0.1484782
Error	364.7	114	3.1991	
Total	845.97	119		Alpha=0.05

Core Length Data (mm.)

Location: Salinas, California, 10/08/98

	Rep 1		Rep	Rep 2		Rep 3	
	Ponderosa	Bronco	Ponderosa	Bronco	Ponderosa	Bronco	
1	33.0	43.0	37.0	52.0	35.0	42.0	
2	38.0	47.0	40.0	42.0	41.0	43.0	
3	34.0	39.0	37.0	38.0	35.0	47.0	
4	32.0	42.0	37.0	43.0	39.0	39.0	
5	30.0	48.0	32.0	45.0	37.0	52.0	
6	32.0	46.0	36,0	52.0	28.0	44.0	
7	40.0	49.0	42.0	37.0	36.0	48.0	
8	41.0	40.0	36.0	42.0	35.0	46.0	
9	36.0	42.0	35.0	48.0	39.0	47.0	
10	37.0	47.0	30.0	46.0	34.0	51.0	
11	34.0	41.0	29.0	41.0	33.0	34.0	
12	33.0	39.0	37.0	39.0	38.0	37.0	
13	31.0	36.0	34.0	42.0	42.0	44.0	
14	28.0	39.0	33.0	37.0	37.0	46.0	
15	32.0	47.0	36.0	34.0	38.0	48.0	
16	35.0	46.0	33.0	49.0	27.0	49.0	
17	39.0	44.0	31.0	46.0	29.0	46.0	
18	34.0	43.0	39.0	35.0	40.0	43.0	
19	31.0	39.0	38.0	53.0	38.0	40.0	
20	29.0	34.0	41.0	42.0	31.0	45.0	
1	//						
Means (mm)	33.95	42.55	35.65	43.15	35.60	44.55	

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Source of					
Variation	SS	df	MS	F	P-value
Reps	68.117	2	34.058	1.7935789	0.171
Variety	2091.7	1	2091.7	110.15173	2E-18
RxV	11.45	2	5.725	0.3014898	0.7403
Error	2164.8	114	18.989		
Total	4336	119		Alpha=0.05	* *

Core Length Data (mm.)

Location: Chualar, California, 10/15/98

	Rep 1		Rep	2	Rep 3	
	Ponderosa	Bronco	Ponderosa	Bronco	Ponderosa	Bronco
1	29.0	56.0	35.0	62.0	44.0	59.0
2	34.0	48.0	50.0	55.0	48.0	68.0
3	48.0	49.0	41.0	58.0	53.0	57.0
4	40.0	46.0	56.0	64.0	50.0	51.0
5	53.0	45.0	34.0	52.0	39.0	42.0
6	45.0	58.0	37.0	38.0	33.0	49.0
7	41.0	46.0	38.0	54.0	38.0	46.0
8	34.0	49.0	41.0	47.0	42.0	43.0
9	36.0	39.0	52.0	44.0	46.0	58.0
10	35.0	67.0	47.0	48.0	47.0	63.0
11	39.0	61.0	49.0	44.0	43.0	67.0
12	44.0	55,0	50.0	64.0	49.0	39.0
13	43.0	61.0	50.0	55.0	39.0	58.0
14	49.0	63.0	46.0	63.0	46.0	59.0
15	50.0	67.0	38.0	49.0	43.0	51.0
16	46.0	55.0	42.0	47.0	37.0	49.0
17	51.0	49.0	47.0	56.0	32.0	46.0
18	53.0	43.0	50.0	65.0	56.0	65.0
19	57.0	59.0	36.0	46.0	51.0	49.0
20	41.0	55.0	39.0	56.0	45.0	44.0
Means (mm)	43.40	53.55	43.90	53,35	44.05	53.15

ANOVA

Source of				
Variation	SS	df	MS	F
Reps	0.5167	2	0.2583	0.0045171
Variety	2745.6	. 1	2745.6	48.009418
RxV	5.7167	2	2.8583	0.0499801
Error	6519.6	114	57.189	
Total	9271.5	119		Alpha=0.05



FORM APPROVED - OMB NO. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE	The following statements are mad 1974 (5 U.S.C. 552a) and the Paper	The following statements are made in accordance with the Privacy Act 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.			
EXHIBIT E STATEMENT OF THE BASIS OF OWNERS	Application is required in order to	o determine if a plant variety protection. 2. 2421). Information is held confidenti			
1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION	3. VARIETY NAME			
Hos Enza Zaden Beheer B.V. RAYO 4/25/0	OR EXPERIMENTAL NUMBER Exp. 5007	Ponderosa			
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and County	5. TELEPHONE (include area code)	6. FAX (include area code)			
1352 Burton Avenue Salinas, California 93901	(831) 754-2300	(831) 754-2975			
a a a a a a a a a a a a a a a a a a a	7. PVPO NUMBER	•			
8. Does the applicant own all rights to the variety? Mark an "X" in ap	propriate block. If no, please explain.	X YES NO			
	6				
Is the applicant (individual or company) a U.S. national or U.S. bas If no, give name of country	ed company?	X YES NO			
10. Is the applicant the original owner?	NO If no, please answer one of the	e following:			
a. If original rights to variety were owned by individual(s), is (are) the	e original owner(s) a U.S. national(s)?				
YES	NO If no, give name of country				
b. If original rights to variety were owned by a company(ies), is(are	the original owner(s) a U.S. based compa	any?			
YES	NO If no, give name of country				
11. Additional explanation on ownership (if needed, use reverse for ext	a space):				
PLEASE NOTE:					
Plant variety protection can be afforded only to owners (not licensees) who me	et one of the following criteria:				
 If the rights to the variety are owned by the original breeder, that person me which affords similar protection to nationals of the U.S. for the same genus 	st be a U.S. national, national of a UPOV men	nber country, or national of a country			
2. If the rights to the variety are owned by the company which employed the	riginal breeder(s), the company must be U.S. t	based, owned by nationals of a UPOV			

The original breeder/owner may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to compete this information collection is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C. 20250, or call 1-800-245-6340 (voice) or (202) 720-1127 (TDD). USDA is an equal employment opportunity employer.

ASSIGNMENT OF U.S. PLANT VARIETY PROTECTION CERTIFICATE APPLICATIONS

Effective March 30, 2000, Coastal Seeds, Inc., a California Corporation, for good and valuable consideration, receipt of which is hereby acknowledged, does hereby transfer, assign and deliver to Enza Zaden de Enkhuizer Zaadhandel B.V., a Dutch Corporation, the Plant Variety Protection Certificate Applications listed on Exhibit "A" attached hereto and incorporated by reference.

Dated: May 10, 2000

Coastal Seeds, Inc., A California Corporation

By: David W. Duke, President

State of California)
)ss.

County of Monterey)

On this 10th day of May, in the year 2000, before me, the undersigned Notary Public in and for the State of California, personally appeared David w. Duke, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

GREGORY M. CHILTON
COMM. #1178366
Notary Public-California
Monterey County
My Comm. Exp. April 3, 2002

Notary Public

EXHIBIT "A"

ASSIGNMENT PLANT VARIETY <u>APPLIED PROTECTION CERTIFICATES</u>

- 1. PONDEROSA Application No.: 9900259
- 2. SILVERADO Application No.: 9900254
- 3. MARGARITA Application No.: 9700075
- 4. MARDI GRAS Application No.: 9800210
- 5. GLADIATOR Application No.: 9800119
- 6. HEARTS DELIGHT Application 9900066
- 7. MEDALLION Application 9800120

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ASSIGNMENT OF U.S. PLANT VARIETY PROTECTION CERTIFICATE

Effective March 30, 2000, COASTAL SEEDS, INC., A CALIFORNIA CORPORATION, for good and valuable consideration, receipt of which is hereby acknowledged, does hereby transfer, assign and deliver to ENZA ZADEN DE ENKHUIZER ZAADHANDEL B.V., A DUTCH CORPORATION, the Plant Variety Protection Certificate listed on Exhibit "A" attached hereto and incorporated by reference.

Dated: May 10, 2000

Coastal Seeds, Inc., A California Corporation

By: David W. Duke, President

State of California

)ss.

County of Monterey (and the selection of the selection o

On this 10th day of May, in the year 2000, before me, the undersigned Notary Public in and for the State of California, personally appeared David w. Duke, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

GREGORY M. CHIL TON
COMM. #1178366
Notary Public-California
Monitorey County
My Comm. Exp. April 3, 2002

Notary Públic

EXHIBIT "A"

ASSIGNMENT PLANT VARIETY PROTECTION CERTIFICATES

- 1. BRONCO Certificate No.: 9500116
- 2. COWBOY Certificate No.: 9600278
- 3. DIAMOND Certificate No.: 9500051
- 4. WRANGLER Certificate No.: 9600279

(AM)



ENZA ZADEN RESEARCH USA, INC.

Commercial Office: 7 Harris Place

Research Office:

Salinas, CA 93901

525 Lucy Brown Lane, PO Box 866 San Juan Bautista, CA 95045

Tel: 831.754.2300

Tel: 831.623.4644 Fax: 831.6231746

Fax: 831.754.2975

To:

Robin Davis

PVP Office

NAL Building, Room 400 10301 Baltimore Avenue Beltsville, MD 20705

Date:

May 4, 2005

Subject: payments

Dear Robin Davis.

I've enclosed two checks:

Check #6618, \$190,~ (5x\$38,-)

To change applicants name from Enza Zaden De Enkhuizer Zaadhandel B.V. to Enza Zaden Beheer B.V. for the following numbers:

- 1) PVP# 9900259 (Ponderosa)
- 2) PVP#200100226 (Coastal Star)
- 3) PVP#200200046 (Durango)
- 4) PVP#200300168 (Telluride)
- 5) Added: PVP#9900254 (Silverado)

Addresses, etc. remain the same.

Check #6577, \$432,-

payment certificate pvp# 9900259. I thought that we already sent this check but that was not the case.

If you have any questions, please do not hesitate to contact us.

Sincerely,

Aemoudt Aardse

Enza Zaden Research USA

831-623-4644 Office:/ Fax: 831-623-1746 Mobile: 831-710-0605

Email: a.aardse@coastalseeds.com